# To whom does the great tradition Sapienza University's Faculty of Architecture belong?

The future after the first 100 years

(in a form wavering between a programme and an essay)

By Orazio Carpenzano



from Mario Sironi's Murale "Italy between arts and sciences" Aula Magna, Sapienza University Rectorate, 1935.

# Table of contents

## **Programme overview**

# Introductory thoughts on the architecture of the current world

Shared responsibility The architectural moment, the political/economic moment Impact of technology, professional monopoly The institutional and cultural role of the Dean Cultivating traditions Everything is design. Everything is architecture Architects will never go extinct: millennials, diversity, and contradictions

# Reflections on Sapienza University's Faculty of Architecture

Shared efficiency Organization of the Faculty Rome/World From concept to final approval Physical places and digital spaces Tangible and virtual heritage The architect's factory A digitally integrated Giovannoni-style architect

## Programme overview

The centennial of the founding of the Faculty of Architecture coincides with the occasion of the election of its next Dean – a fact that, for the entire university community that makes reference to the Faculty of Architecture, raises two possibilities: either carrying out or postponing choices that will constitute an effort of programming and responsibility.

Our Faculty, the first founded in Italy, is comparatively young in comparison with other institutions of established prestige training architects in other countries.

The mandate of the Faculty of Architecture of Sapienza University in Rome – and in Italy – between the two post-War periods was clear and recognizable. The first two generations of academic architects and masters conceived and applied themselves to training an architect that had a very specific professional and social role: to build the modern Capital and the new cities of a new nation, and to rebuild and enlarge them after the military conflicts and immigration from other parts of the country that followed.

Some of the most highly appreciated contemporary economists place faith in the possibility that new forms of participation are taking shape, within which architecture might continue to energetically perform a task decisive for and important to society at large.

Internationally established scholars maintain that the productivity of an architect's professional service is even more economical and competitive than a similar service produced by the apparatus of artificial intelligence; and that the three pillars upon which the engineers who founded Sapienza's Faculty of Architecture based the curriculum of the Italian architect – composition and design; historical and city studies; structural and technical matters – are still the soundest ingredients for training the finest architects.

One of the next Dean's tasks, in a constant and constructive dialogue with the departments, should be to join the University's future government in exploring the possibility of taking efficient action with regard to the teaching programme, in order to propose possible solutions and add value to the current offering, making it more flexible, efficient, attractive, competitive, and up-to-date.

The Dean's coordinating role should therefore be interpreted in the cultural sense too, without limiting it only to the organizational level, while thinking both about what is already taking place in other faculties at Sapienza, and about the contribution that all the Departments already offer to a largely shared and transversal teaching.

"International didactics" will have to equip itself better, considering the new circumstances, and assessing further alternatives, if we wish to remain connected with the players that will be determining future global development and that show interest in Italian architectural culture.

To offer an advanced level of skills for using digital software and for exercising the profession, along with the quality of architecture teaching that the Faculty has traditionally been able to guarantee, while also passing the scrutiny of international comparison, will, I think, for the future Dean, be a possible, practicable, and realistic challenge.

The physical architecture of the places of the Faculty and of the University is a collective heritage that requires continuous reinvention, care, and adaptation to the evolution of institutional architecture that must also take account of the transformations in the current world. The ongoing improvement of the physical and virtual space the Departments share will be another one of the tasks awaiting the new Dean, essential for presenting the Faculty to and representing it for everyone (!), as a driving, attractive institution for the Capital, the country, and the world.

The Faculty of Architecture can resume providing a good example, also within Sapienza, as concerns the architecture of its spaces, as it has already done on several occasions: it is important for it to do so in an increasingly convincing way. The intrinsic value of the places and the added value of what we do, the integrated and multiform knowledge among disciplines, is part of our heritage, which must be protected and brought up to date to avoid its obsolescence – a task that, over the past one hundred years, the generations of academics that preceded us have been able to interpret overall.

The technical, administrative, and library personnel should be ensured of the possibility to update their digital, linguistic, and accounting skills, to form a quality administration that can tangibly support the needs of teaching, in order to make their doings more effective and gratifying while taking account of the inclinations and ambitions of each.

Our Faculty has a very high level of teaching, and our Departments have produced excellent research in many fields. Systematizing all this, in order to make our qualities more legible and appreciable even by parties outside of the university, is an objective that the future Dean must pursue in order to place the architecture practised at Sapienza as much as possible back at the centre of the national landscape, and suitably positioned internationally. All efforts will have to be united, and each Department, with its own identities and features, will have to be allowed to find adequate space in communication, in activities to be shared and supported together, in the support that the Faculty can give to a commitment that must never feel isolated from the rest of the community. The future Dean will therefore have to be able to listen and take initiative, looking to the maximum possible inclusion, in the knowledge that only through everyone's work can the Faculty reclaim its motivation and pride.

Today's cultural and economic crisis can be dealt with by raising the added value of production capacity.

It is the task of our academic community, in all its disciplinary and generational components, to be able to respond to this renewed challenge.

## Introductory thoughts on the architecture of the current world

## Shared responsibility

This document collects some considerations on the future of Sapienza's Faculty of Architecture one hundred years after its founding.

This occasion coincides with the election of the next Dean – a fact that, for the entire university community that makes reference to the Faculty of Architecture, raises two possibilities: either carrying out or postponing choices that consist of an effort of programming and responsibility relating to certain issues that have been ongoing for some time.

These issues are amplified by the exceptional effects of the Covid-19 health crisis during which, while operating under emergency conditions, we have had to collectively apply ourselves to new working conditions, while receiving new stimuli but while also grappling with new problems. To properly build a programme for the future, it will be necessary to prepare a careful and shared institutional path, and to initiate a relaunching process whose implementation will require the active involvement and participation of all the Departments and of our entire community, especially at a time in which, more or less consciously, we tend to be "prisoners of the present"<sup>1</sup>.

## The architectural moment, the political/economic moment

Our Faculty, the first founded in Italy, is comparatively young in comparison with other institutions of established prestige training architects in other countries. In the English-speaking world – the United States and the United Kingdom in particular – a number of architecture schools have already attained and celebrated 150 years of existence embracing three centuries<sup>2</sup>, having been established in the mid-nineteenth century and encountered social and technological changes that, observed from afar, are far deeper than those experienced by our Faculty during its first 100 years.

Indeed, the schools training architects within the walls of the historic campuses of North America and the United Kingdom started their journey within the framework of a still premodern society, in which the idea that the "transformational capacity of human labour allows the world to be rendered "inhabitable" was consolidated<sup>3</sup>. And the categories of sociability and empathy – decisive in the urban history of the European cities – analyzed by the most brilliant economists of the time, were applied to a society that gave rise to mechanisms of inequality in opposition to <sup>4</sup> the mechanisms produced by wealth distribution determined by neoliberal economic thought<sup>5</sup>. This line of thinking has characterized international economic policies over the last thirty years, and has

<sup>&</sup>lt;sup>1</sup> G. De Rita, A. Galdo, Prigionieri del presente, Einaudi 2018.

<sup>&</sup>lt;sup>2</sup> J. Oackman, Three Centuries of Educating Architects in North America, MIT Press 2012; R.M. Stern, Pedagogy and Place. 100 Years of Architecture Education at Yale, Yale University Press, 2016; H. Harriss, D. Froud, Radical Pedagogies: Architectural Education and the British Tradition, RIBA Publishing, 2015.

<sup>&</sup>lt;sup>3</sup> A. Smith, La ricchezza delle nazioni. Abbozzo, Bollati Boringhieri, 1959, pp. 16-17; UTET 1996.

<sup>&</sup>lt;sup>4</sup> As explained by T. Piketty, Capitale e Ideologia, La nave di Teseo, 2020.

<sup>&</sup>lt;sup>5</sup> On a global scale, a growing part of disadvantaged social groups have felt poorly represented.

produced and financed a type of city, of territories, and of structures – becoming the more or less commendable materialization (justification)<sup>6</sup> of the time's economic, cultural, and artistic euphoria – aimed at representing public institutions and private interventions less and less oriented towards the construction of parts of cities, or ordinary urban fabrics, of neighbourhoods, homes, and services; that is, representing the themes of design that had marked the professional activity of the first and second post-War periods, to which many professors in our Faculty have contributed with genius and skill. In essence, "knowledge and history remain our best resources,"<sup>7</sup> maintain some of the most appreciated contemporary economists, placing their faith, with some lines of optimism, in the possibility that new forms of participation might be taking shape. And we architects, I add, place our faith along with them, so that architecture might continue energetically to perform a task that is precise, recognized, and important for society at large, to which we professors make our contribution through the fundamental and indispensable generational turnover.

For this reason, I have been maintaining for some time that a "law on architecture" ought to be promoted, albeit in the awareness both of how difficult and of how real and necessary this vision is, and I believe that in this phase, precisely to affirm its cultural role, a Faculty capable of presenting, in a shared way, its different skills and inspirations expressed by the specific realities of its Departments, must take on a public role in proposing an opinion movement of architects.

#### Impact of technology, professional monopoly

How do we relate this reasoning with the future of our institution? Careful and cultivated humanistic observers across the Channel, who have been working at architecture schools for some time, in looking to the past help us understand that: "Architecture as a profession acquires a new type of status in the capitalist world, and is posed as a set of skills that goes beyond selling a service. The idea of architecture is associated with training and university institutions, which legitimate an architect's existence"<sup>8</sup>. In particular, the history of architecture is given the fundamental task of "legitimating" the figure of the architect in society and of helping to uphold his or her professional monopoly.

Italian scholars of the history of architecture<sup>9</sup>, who have been teaching for years at the finest American and British architecture schools and have studied the

<sup>&</sup>lt;sup>6</sup> Paraphrasing Piketty.

 $<sup>^7</sup>$  To thwart the risk of authoritarian regimes, writes Piketty, calling for a "new participatory socialism for the 21st century."

<sup>&</sup>lt;sup>8</sup> M. Cousins, Architecture and its Past, Architecture and its Unconscious, 2015: https://www.youtube.com/watch?v=pBYoZ1wC0T0; Cousin applies to architecture the same exercise that Michel Foucault proposes in The Birth of Chemistry, discussing the birth of modern medicine and the close relationship between the exercise of the practice of the physician's profession, the hospital as a place where the profession is exercised, and the professional and pedagogical corpus, which revolve around the profession and legitimize one another. For Cousin, the history of architecture has carried out the fundamental task of "legitimating" the figure of the architect.

<sup>&</sup>lt;sup>9</sup> Mario Carpo, Reyner Banham Professor of Architectural History and Theory at University College, London, interviewed on 13 October 2017, Mario Carpo – The Second Digital Turn da PA Parametric Architecture https://parametric-architecture.com/pa-talks-002-mario-carpo/; See also the

impacts of technological revolutions in architecture from the Renaissance to the present day, maintain that the current productivity of an architect's professional service is even more economical and competitive than a similar performance produced by instruments of artificial intelligence; and they maintain that the three pillars upon which the architect's Italian training is based – the design studio, the classroom, and labs – which is to say, in essence, the three pillars upon which the founders of Sapienza's Faculty of Architecture based the curriculum of the Italian architect (architectural composition and drawing, from design to the urban dimension; historical studies; structural and technical matters) are still the soundest ingredients for training the "best" architects (which does not mean training "starchitects"), if such a recipe ever were to exist.

But we must also grapple with the limits and the geopolitical role of the country in which an institution operates, in a historical phase and in circumstances in which we are called upon to analyze ourselves and to decide to undertake or to postpone – with the risk of perhaps definitively giving up on – certain choices without missing the moment, because a program reveals its effectiveness over the medium and long term.

All long-course institutions, like our Faculty, may be metaphorically described as *living organisms*, capable of activating *antibodies* when the change that occurs does not take hold, and the conscious and unconscious expectations that sustain and motivate the intellectual connective tissue of which a community of teachers, scholars, and architects is composed are disappointed. Therefore, the choices must be discussed, assessed, and pondered<sup>10</sup>.

#### The institutional and cultural role of the Dean

In this regard, it is important to emphasize that perhaps too hastily, over the past ten years, many academics in Italy, overwhelmed by the new elements of Law no. 240/2010 and its arduous implementation, have reductively interpreted the role of the school director or Faculty dean, unable to grasp the symbolic, cultural, and institutional importance of a figure that instead, at Sapienza, considering the academic heft and size, was rightly deemed indispensable.

We must therefore acknowledge Dean Anna Maria Giovenale's patient work in maintaining the meaning of the Faculty as an institution historically unique for its inescapable national role of founding a discipline and a modern trade – a necessary work that, in my opinion, needs far more initiative in order to bring itself up to the challenges we have before us.

comparison between Peter Eisenman and Mario Carpo "Architecture or Computation" September 2020; https://www.youtube.com/watch?v=JOpVTUCshaE

<sup>&</sup>lt;sup>10</sup> Eva Franch i Gilabert's recent removal as director of the architectural Association (1847) is a significant affair, from which various reflections may be drawn on the difficulty of identifying the personality to whom to entrust changing and interpreting an institution's tradition, and the electors' degree of uncertainty: in two years' time, the same Council Members who voted 67% in favour – after a long and dialectical process that the institution follows by tradition in order to elect the director – demanded her dismissal with 80% of the votes, in spite of some major achievements made during the first year.

#### Cultivating traditions

The metaphor I often use when speaking of the future of Sapienza's Faculty of Architecture is that of a century-old oak we cannot let die, but that it is our task to strengthen, so that it might live the next hundred years while transmitting to the future the values in which its community recognizes itself in the present, by safeguarding and reinforcing its roots (its own past), as happened to the other architecture schools born before our own, amid difficulties and successes.

#### Everything is design. Everything is architecture

The figure of the architect still has a future. What future? According to expert academics, the need and *desire for design* is and will be guite strong in the global village. Therefore, designers will continue to be required to invent and reinvent the world<sup>11</sup>, a task that involves the urban planning dimension and all the specific features of the design of architecture, the city, the territory, the landscape, and infrastructures<sup>12</sup>, in accordance with conceptions well established in recent decades, that are, however, exposed to the scrutiny of new intellectual and technical challenges. In the meantime, even some esteemed philosophers dealing with artificial intelligence are starting to use the concept of design by applying its adaptive nature to philosophy, which is understood in fact as *conceptual* design <sup>13</sup>, as a new category able to overcome the idealism/realism – or, if one prefers, the emblematic/ paradigmatic - dichotomy. Similarly, the economic disciplines and the hard sciences have shown growing interest in the methodologies and the pedagogy used in teaching architectural design, and in the collaborative, flexible, and adaptive nature of the architect's profession and of the teaching of architecture<sup>14</sup>. All are issues that, for us architects, are *congenital* but, told and interpreted in a new light, might constitute a point of departure for reinforcing confidence in architecture.

## Architects will never go extinct: millennials, diversity, and contradictions

With this, I intend to emphasize, on the basis of the analyses and projections available for consultation, that the professions of the architect and of the designer do not appear to be among those at risk of going extinct as other professional figures are. If anything, the already-mentioned problem continues to persist – as took place in the mid-nineteenth century – of the monopoly relating not only to traditionally competing professions (engineers, surveyors, etc.), but also to new and different specializations that are advancing and, although hard to identify, are always connected to new technologies.

<sup>&</sup>lt;sup>11</sup> M. Wigley, B. Colomina, Are we Human? Notes on an Archaeology of Design, Lars Müller Publishers, 2016. The authors emphasize that humans are the only living beings on Earth that have always produced design objects, proposing theses that, while renouncing nothing, join together nostalgia for the avant-gardes and postmodern culture. The small volume is the catalogue for the 2016 Istanbul Biennial.

<sup>&</sup>lt;sup>12</sup> A great many references may be pointed to in support of theses of this kind, for example the "Alles ist Architektur" ("Everything is architecture") show organized by Hans Hollein and Walter Pichler in New York and Vienna in 1966-1967.

<sup>&</sup>lt;sup>13</sup> L. Foridi, Pensare l'infosfera, Raffaello Cortina, 2020.

<sup>&</sup>lt;sup>14</sup> M. Polanyi, The Tacit Dimension, 1966; see also https://tacit-knowledge-architecture.com

Indeed, other academic settings, while wondering in recent years about what it means to teach architecture to millennials, and concerned by the risk of failing to respond to the demand for skills and professional figures more suited to their condition as digital natives and mindful of the pitfalls associated with the possible discontinuities caused by the use of technology, also point out the following: "Who could have foreseen that a company that invents a search engine like Google might attempt to usurp leadership of the driverless car market from the automotive industry? The fact that BIM software is triggering the slide towards automation should send shivers down the spine of every architect. In the years to come, the decision will be made as to what side of the algorithms architects will be on: on the side of those who write them, or on the side of those who are dominated by them"<sup>15</sup>.

These considerations intend to stimulate an open dialogue, with the aim of building together a framework of reasoning upon which each of us might and will be able to add and spin a thread of our own experience, in order to put back in place a realistic and objective weave of contemporary phenomena that intercept and overwhelm our activities on urban landscapes, inhabited territories, objects and infrastructures indispensable for being able to build a programme of credible and reasonable work<sup>16</sup>.

<sup>&</sup>lt;sup>15</sup> D. Sollohub, Millennials in Architecture: Generations, Disruption, and the Legacy of a Profession, University of Texas Press, 2019, p. XIII.

<sup>&</sup>lt;sup>16</sup> Cf. Orazio Carpenzano, Progettare ambienti di apprendimento, Rassegna di Architettura e Urbanistica n. 156 – Settembre-Dicembre 2018, pp. 32-40.

# Reflections on Sapienza University's Faculty of Architecture

## Shared efficiency

The ten years following the entry into force of Law no. 240/2010 have made it possible to comprehend its positive aspects and to experience its serious limitations.

Governance: One of the tasks of the future Dean, in constant and constructive dialogue with the Departments, will have to be that of joining the next University government in exploring the possibility of taking efficient action with regard to the teaching programme. The Dean's coordinating role should therefore be interpreted in a cultural sense too, without limiting it only to the organizational level, while thinking both about what is already taking place in other faculties at Sapienza, and about the contribution that all the Departments already offer to a largely shared and transversal teaching.

The purpose is not to reduce, a priori, the university degree courses, or to enter into conflict with the Departments' curricula, but rather to give the Dean the ability, while taking account of the experiences already gained over the past ten years and from a *super partes* vantage point, to assess and actively propose possible solutions to add value to the current educational offerings, while making them more flexible, efficient, attractive, competitive, and current. Of course, the Dean's mandate cannot neglect rigorous respect for Sapienza's rules and its Statute. Therefore, the future Dean will have to continue to coordinate the Departments' activities in relation to their teaching responsibilities, taking account of the Faculty's tradition and development problems, and be an active reference in the debate over adjusting academic structures and the functions bringing them to life.

However, at the same time, the Dean's coordination function will have to take on a cultural dimension, and become the channel through which the Departments might be able to capitalize on what unites them in a single Faculty, while the individual experiences of the teachers and of their scientific and disciplinary sectors of reference might be able to find the right attention and meaningful support. For other architecture schools in Italy, given also their size, it is easier to present oneself with a united voice and a recognizable profile outside the university as well, from administrations to the media and citizens, from politics to economics and to those working on the territory. Sapienza's Faculty of Architecture can reconquer its role in this setting only if it can offer a synthesis of the Departments' activities and act so that their differences might neither be placed in competition with one another, nor risk being fragmentary. Without finding a common expression of the cultures of which our Faculty is composed, no relaunch is possible, and its very image is in danger of being marginalized. The new reality we are being called upon to grapple with, however, requires the ability to look into the distance, and to do so together (and I emphasize "together"), by raising the level of dialogue with a view to a common objective.

## Organization of the Faculty

In the coordination work assigned to the Dean, a central position naturally relates to organizing the common aspects of our work, starting from those that relate to administration and teaching.

Along with resolving a general problem of efficiency that has been pointed out so many times, Sapienza will have to grapple on a central level with optimizing the teaching offerings, an effort already underway over the past ten years, also with the purpose of lightening the administrative offices' workload<sup>17</sup>. This, among other things, requires priority attention – an attention that is no minor matter for reasons connected to pensions, to the skills and aptitudes of individuals, and to the need to reasonably distribute duties and workloads.

To be able, for example, to further streamline the procedures for changing the degree course, and the problems of teaching, might be one of the important issues to which to continue to apply ourselves. To do this, we must take reasonable action as to the number of credits (while complying with ministerial decrees and the disciplinary orientation of the degree courses) in order to make transfer and enrolments between the first and second levels (nearly) automatic, for example in the transition from the three-year degree course to year four of the five-year course (and the other way around), without further burdening the teaching committees' work, and thus giving the students an incentive to remain enrolled in our courses.

Much has already been done to optimize training offerings in the teaching, also taking account of the difficult paths that, over the course of a decade, have seen a downsizing of the degree courses activated during the previous decade, which is to say the decade when the Faculty was split (2000-2010). However, in spite of their reduction, there is still clear "overabundance" and partial overlapping that may be noted with the purpose of capitalizing on the energies of the faculty members who are generally burdened with responsibilities of various kinds. There was a time when these efforts had direct effects on resources; in the future, it must be well understood whether this will still be the case, and to what degree, and what objectives are to be targeted in order to obtain resources and increase the quality of our work – in terms of both efforts and results.

The achievements of recent years are due mainly to the efforts of those who have taken on coordination and management tasks, navigating in often stagnant waters, but considering a series of procedural dysfunctions and acts of resistance with which we are all familiar, and which I omit listing here, while taking account of the great many students whom we have lost over the years because they went elsewhere after earning their three-year degrees. This can be done only if we look to the degree courses with an overall, impartial vision, which is to say the condition with which the future Dean should be able to operate, in a dialogue with the Departments and in the interest of all.

In this regard, it would be appropriate to supplement the dean's office with, or to see that it is assisted by, a technical/legal secretariat to ease relations with the central offices and liaise with the Departments.

<sup>&</sup>lt;sup>17</sup> Giving opportunities to technical, administrative, and library personnel to apply themselves to continuous training, of use for acquiring new skills (digital, linguistic, accounting, and so on).

## Rome/World

World: This setting also includes the activities of the Erasmus office, our interface with international students that requires more support and does an excellent job, often working with fine grant winners while taking on aspects that frequently require interventions providing linkage between the Faculty secretariat, the Departments, and the central offices. The Faculty's international academic activity inside and outside of Europe has been quite intense over the past twenty years, with growing participation by many of the Faculty's teachers<sup>18</sup>; now, however, it is diminishing. The "international didactics" activity will have to be more appropriately equipped, considering the new circumstances and assessing the possibility of activating new attendance options sustainable for foreign students - and also interesting for any Italian students - who are unable to afford to stay in Rome when coming from distant countries. This is fundamental especially over the long term, if we are to remain connected with the players that will determine future global development and show interest in Italian - and more generally Western – architectural culture, to be accessed through Rome and its institutions. It will be necessary to carefully analyze current demand in order to maintain the Faculty's high international standing<sup>19</sup>, to guarantee the level of attractiveness ensured thus far, and to anticipate the near future to the extent possible, by taking account of the latest events and of the current trend in student mobility, which was never entirely interrupted in recent months - both physically and virtually - despite the serious events that have taken place.

Rome: Moreover, it is essential to keep high and lively the level of the Faculty's involvement in the open dialogue with those who decide on the transformations of Rome, a city with which Sapienza has always had a profound and generative bond - and to do so regardless of the actual responses and the receptiveness of a Capital administration, which has long been distant and disinterested, on the one hand because of the political moment of confused decline, and on the other hand given our clear lack of adequate responses to the needs of a continuously evolving profession. For our initiatives to have a memorable and measurable impact on civil society, it is essential for there to be integrated commitment among the Departments, with the aim of pursuing common, parallel, or coordinated objectives, which is to say objectives worthy of the institutional mission, keeping in mind the rules defined by the University for the Third Mission, and without neglecting the possibility that local authorities and public and private institutions might interact in the training of future generations and in field research applied to complex situations. Clearly, all this does not pertain to Rome alone, but all the other opportunities that may be constructed, and involving all

<sup>&</sup>lt;sup>18</sup> In addition to the new opportunities arising from a general acceleration in international academic mobility over the past decade, the departments in the Faculty of Architecture have maintained active the international relations promoted in previous decades, demonstrating interest in international academic traditions and an opening towards new opportunities.

<sup>&</sup>lt;sup>19</sup> The collective experience of DiAP – Department of Architecture and Design in collecting research background and international didactics, is an example that I consider a virtuous one, which might be articulated for the entire Faculty's international didactic activity, with means and outcomes of different kinds, and would be an important presentation for international mobility and attractiveness: DiAP nel mondo visioni internazionali, Editrice Sapienza, 2020.

disciplines, depending on the specific features of the occasions, in other Italian and international situations. In fact, during these recent years, all the Departments in the Faculty of Architecture have built various initiatives oriented in this direction<sup>20</sup>, that may be considered laudable tests, but that might be far more effective if they were presented to Rome and the World as a system, showing their already solid international cultural presence and the articulation of their technical and specialist skill – and if they demonstrated the strength of the multiple and multidisciplinary nature to which they belong, following the intellectual and technical tradition that so remarkably helped give shape and meaning to modern and contemporary Rome.

#### From concept to final approval

During the occasions and moments of dialogue. and not least the Committees for the State Examinations for the exercise of the architect's profession, the representatives of the National Council of Architects and of the professional orders, and the professional architects/Committee-members, have reported to us the serious shortcomings in the preparation of most of our former students, in the subjects essential and fundamental to performing the functions of qualified technician, and that these shortcomings relate not only to the regulatory aspects and procedures, but also to the clarity of the drawings and of design thought, or the ability to write short, clear historical/technical reports. Our study paths should include natural learning (not rote and prepared for the occasion of the state examination) of the skills needed to practise the profession, and clarify the elementary and complex relationships between "concept" and "construction."

*Profession*: It would be important to join the professional orders in coordinating more effective formulae for learning the aforementioned professional skills, through optional or mandatory courses to be held as part of the ordinary curriculum, in such a way as to become aware of the fundamental issues that regard construction, urban planning, and work site practices, in a close relationship with the projects that are developed in the curricular courses. We must reflect upon the poor incisiveness of the passage of knowledge on these issues so basic to our discipline, in spite of the different teaching experiences that already exist.

The years to come will require the availability on the market of architects/technicians who also interpret the necessity of new figures, aware and capable of solving real problems through good ideas; the only way not to renounce quality and beauty is to fully know and master rules, tools, and techniques (intellectual domain over rules, tools, and techniques, which can be exercised only through the development of critical knowledge!). It is therefore important for the students to be equipped to organize a project from the phase of its initial conception and its development, until the phase of earning certifications and completing the tests. This *forma mentis* involves all scales of

<sup>&</sup>lt;sup>20</sup> The Department of Planning, Technology and Design, on 04 July 2016, organized Roma. Per una Città motore di sviluppo; the Department of Architecture and Design has organized three editions of the Roma come stai? initiative (2017, 2018, 2019). The Department of History, Representation and Restoration of Architecture organized the Declinare Roma initiative in 2018.

architecture (buildings, city, territory, landscape) and of design (material and immaterial).

New Technologies: Considering the current moment, it is deemed essential to consolidate in all activated curricula the use of BIM, 3D, and Virtual Reality software, in accordance with competitive professional standards, while not contenting ourselves solely with the good intentions of the teachers and students who have the sensitivity to understand it. The achievement of qualified standards ought to be guaranteed in a more widespread way to all students and in all courses, right from the first years of learning. Intensive basic and advanced courses ought to be organized in September for example, prior to the start of classes, in such a way that certain tools might already be acquired in order to be transferred into and refined in the courses' ordinary didactics.

Offering an advanced level of skills for the use of digital tools and for the full and concrete exercise of the profession which – I forcefully restate – requires teachers to design in order to teach how to design, along with the quality of the architecture didactics that our Faculty has traditionally been able to guarantee while also passing the scrutiny of international comparison, would be a possible, practicable, and realistic challenge in which a new generation of teachers might be forged.

#### Physical places and digital spaces

The Faculty's locations are places of the physical representation of the institutions, where on a daily basis we spend hours of our teaching and academic commitment. They have been the historic stage for important events and decisions that still continue to give shape and meaning to our institutional commitment, to our way of thinking, and they have been the field of action for the curricular experimentations undertaken by the Faculty.

Therefore, the physical architecture of the places merits continuous maintenance, care, and adaptation to the evolving institutional architecture that must also take account of the transformations of the current world.

The future arrangement at Borghetto Flaminio will offer new opportunities for teaching, study, and encounter. With a view to carrying out this intervention, whose history dates back to remote times now, a common dialogue will be needed on how to present the Faculty as an integrated system in which it is immediately clear, for the students, what to find and where.

Streamlining the courses' scheduling and the use of space might be another objective to be pursued, taking account of the needs of the students and courses in doing their classwork, but all this will have to be discussed and verified also in consideration of the uncertain timing of the current emergency. However, for the future outlook, careful consideration may be made of the example of other Faculties that, in Italy, have compacted the number of lab hours and left one day a week free for students for home study, in addition to providing increased space available to the students for both collective and individual study.

Of course, the above are hypotheses that will have to be discussed in order to ponder and foresee the effects that a more flexible organization of logistics and scheduling may have on the general performance of the work and the quality of the teaching activity. For this purpose, account will be taken of the important work already performed by the coordination of the university degree courses and of the post-Covid experiments, with support from the Dean's offices and from the teaching contacts in the departments.

The Covid emergency has subjected the Faculty to a stress test that has been continuous, prolonged, and burdened by subsequent, inescapable corrections of Sapienza's protocols. I would like to take this opportunity to thank the Faculty's technical staff, which spared no effort to ensure the resumption of teaching; the administration, which in record time overcame the bureaucratic obstacles to acquiring the necessary materials; and of course all my colleagues, who during the past term showed – and are showing now – exceptional flexibility, competence, and dedication to their work.

Our Faculty has a very high level of teaching, as also demonstrated by the results of the students' opinion survey (OPIS), and our Departments have produced excellent research efforts in many fields, constantly improving their results since the entry into force of the national assessment procedures. Systematizing all this, in order to make our qualities more clearly legible and appreciable even by parties outside of the university, is an objective that the future Dean must pursue in order to place the architecture practiced at Sapienza as much as possible back at the centre of the national landscape, and suitably positioned internationally. All efforts will have to be united, and each Department, with its own identities and features, will have to be allowed to find adequate space in communication, in activities to be shared and supported together, and in the support that the Faculty can give to a commitment that must never feel isolated from the rest of the community. The future Dean will therefore have to be able to listen and take initiative, with an eye to the maximum possible inclusion, in the knowledge that only through everyone's work can the Faculty reclaim its motivation and pride.

The continuous improvement of the physical and virtual space that strategically and usefully represents and presents the Faculty to everyone as a propulsive and attractive institution for Rome and the country will be one of the new Dean's challenges, also by recovering, where applicable, the tradition of the Faculty Bulletin in collaboration with the Central Library, and any other interesting contributions.

The Faculty of Architecture can continue to provide a good example within Sapienza as concerns the architecture of its spaces, as it has already done on several occasions, and must continue to do so with greater incisiveness.

#### Tangible and virtual heritage

The intrinsic value of the places and the added value of what we do inside them are facts that feed off one another. Therefore, the joint care of one and the other cannot be neglected by amplifying superfluous and dispersive compartmentations.

Integrated knowledge among disciplines is a congenital feature of Italian and above all Roman architects, and was at the basis of the cultural project that articulated their conception, and that still sets them clearly apart from architects trained in other cultural and geographical situations. All this is part of our heritage, which must be protected, nurtured, and updated to avoid its obsolescence – a task that over the last century, the generations of academics that preceded us were on the whole able to interpret.

To continue to learn how to capitalize – through a process of self-learning – on the practice of transmitting and transferring knowledge between generations, and of cross-fertilization (as the English-speaking world puts it) among disciplines, is an opportunity to make joint progress.

The occasion of the centennial exhibition and the activation of the new space/gallery on Via Gramsci, like other ongoing and future experiences, commit us to continuing the collective exercise of exploring the past of our Faculty's academic life, in order to select parts of our highly original legacy to be reelaborated in the present and transmitted to the future.

We all understand that some gears in our precious institutional machine are no longer able to function or have effect, and that they therefore have to be replaced or overhauled. But over these past one hundred years, the Faculty has tried out rather different teaching formulae and, in spite of this, the gene of the original training project has never been extinguished – as has taken place for other disciplines or trades – and has even had the strength to reproduce elsewhere, at Roma Tre University and outside of Rome.

In addition to identifying new and renewed physical spaces, the activation will be encouraged of programmes and activities (exhibitions, postering, seminars), which is to say of places of dialogue devoted to students or proposed by the students – the most important of our heritages, our future – that will see their active and proactive involvement. This type of stimulus may be of interest for verifying aptitudes, vocations, and opportunities, as well as for healthy generational dialogue, and might also involve the theoretical/expressive and technical/operative aspects of the discipline of architecture.

Once again, the challenge lies in knowing and assessing, by selecting from among the finest traditions of the past, interpreting the present and anticipating the future, and helping it build and not letting it die, with caution and courage.

#### The architect's factory

Other hypotheses for a more radical streamlining of the training offerings should be assessed overall and decided upon in accordance with a procedure that activates an open dialogue, taking account of various aspects and of the longterm objectives of the Departments and disciplines. Over the course of the past twenty years, in the wake of decisions by the national governments, we have gone from a decade of lively euphoria (2000-2010) which saw an unprecedented proliferation of university degree courses, to a decade of severe downsizing (2010-2020), even though the instinct for proliferation was never wholly extinguished. Law no, 240/2010 marked a significant turning point also for socalled "productivity" in research, an issue that, except for additional changes of course on a central level, will incisively affect the younger generations of teachers, setting them in bitter competition with other scientific disciplinary sectors. The research tradition in the Faculty of Architecture in general, with some exceptions in the case of certain sectors, still has little experience with highly competitive international calls and with the type of research that has been practiced for some time in the hard, social, and humanistic sciences. Supporting the Departments in

this aspect of their activities with a central office that routes and facilitates procedures, following the example of what takes place at the University with the work of the Research and Technology Transfer Support Area, may be another perspective of the Faculty's coordination work, in addition to being a way to capitalize on the specific nature of the architects' research work, which is often little understood at the level of our central administration.

Planning and designing generational turnover over time and attempting to vie in the competition of "departments of excellence" called for by Law no. 232 of 2016 (2017 Budget Law) will be another task that the Dean's coordination activity will have to engage in, serving as interpreter to synthesize the Departments' needs. It will be indispensable to analyze and understand the work of the Italian locations that have had success (PoliMi, Iuav, PoliTo) in disciplinary areas that are different but close to our own, which I am certain do not have better intellectual and academic resources, but have been able to more effectively organize the strategies necessary for achieving highly significant results for the careers of individuals and for the weight of the institution (in Venice, Iuav, for example, obtained financing that led to 7 full professor positions beyond the planned upgrades – which were themselves many!).

It bears wondering whether and in what direction energies are to be spent, and whether the commitment of instructors and the commitment of professors and of Technical/Administrative/Library personnel is to be balanced, taking account of the objectives connected to research, the communication of research, and the Third Mission - and, moreover, whether to continue investing energies in the proliferation of first- and second-level didactics; whether to approach with determination the possibility of delivering certain courses to be managed entirely online<sup>21</sup>; and whether to perfect and refine third-level training offerings. Also to be explored are the new possibilities relating to the Doctoral courses, over which the Faculty does not have direct competence, but which it houses in its locations as well, and which attract many university graduates from countries we once defined as "emerging," in search of a sort of "initiation to western culture" indispensable for raising their professional status in their home countries; they might constitute an even larger basin of first-level students in the near future. And indirectly, we ought to guarantee the establishment of an international academic environment for Italian students, too. In all cases, the training offerings should be presented and communicated more organically and comprehensibly than what is allowed by the web tools made available by the University today, which have already improved a great deal over the past three years, and which the personnel of the departments and of the Dean's office has committed to making the best use of: it will be necessary to work with the future Rector on this as well.

The four departments constituting the Faculty of Architecture have dedicated enormous resources to maintaining their own members' high levels in didactics, in research, and in the Third Mission, while supporting their own lines of study and their own local and international academic relationships.

<sup>&</sup>lt;sup>21</sup> Sapienza's three-year degree course in Information Technology, for example, has a tele-learning channel carried out with Unitelma Sapienza. If Sapienza is unable to respond appropriately to this type of demand, which existed prior to March 2020, private universities will do so.

However, the link ought to be better defined and consolidated with certain Departments of the Faculty of Engineering, and more generally with other academic structures where the disciplines are more directly involved with the IT/mathematical, technical/technological, and environmental aspects, as well as those of the historic and archaeological heritage, to better develop innovation in didactics and excellence in research – by fully exploring, with awareness, the multidisciplinary cultural genealogy of the Faculty of Architecture, a condition that at many times over the past century has constituted a point of strength, of amplification, and of multiplication of opportunity, and not only of conflict and superimposition. It is necessary to reflect upon the available forces, the departments' ambitions, and the objectives to be achieved at Sapienza, and in the Italian and international settings as well.

## A digitally integrated Giovannoni-style architect

During these days, some colleagues have pointed out to me that the model upon which our teaching offerings are based, founded upon laboratories, corresponds roughly to the one embarked on during the 1990s. Is it still adequate for the profession that is carried out today, and that will be carried out five or ten years from now?

It would be necessary to invest in a more structured way in training students to use the software most in demand on the professional market, while seeking to raise the level of expressiveness useful for an architect, which ought to be constantly cultivated without renouncing – but in fact revitalizing and insisting upon – the use of architecture's traditional representation techniques. Great commitment has been devoted to these aspects, but all enrolees should be subjected during their course of study to training organized and integrated with the courses in the curriculum in which the design exercises (compositional, structural, systems) are elaborated. Until now, the possibility of acquiring *soft skills* of this kind, fundamental for the labour market and for effectively expressing ourselves as quality architects, has been left to the good will of teachers of drawing and relief (who transmit basic skills) or of design and planning (who perform dedicated exercises) – or of the students themselves, who invest in strengthening their own skills and abilities.

The Centre for experimentation and innovation for didactics (Sperimentazione e Innovazione per la Didattica – S.I.D.A.) of the Faculty of Architecture may pay a fundamental role, among other things, for training in the advanced use of 3D printers and model construction. 3D printers should have a greater presence in our locations, and their proper use should have a convincing impact not only on the courses in which an architecture project is elaborated on all scales of the building and of the city, but also for the teaching of courses in the History and Restoration of architecture and for the structural and plant disciplines. This is also because 3D printing is a fundamental industry for the future, and the Faculty of Architecture cannot run too far behind.

The possibility of possessing the basic knowledge of computer programming, as takes place in other Faculties at Sapienza, is another option that should be assessed and promoted on a central level as well. To graduate students who already possess certifications or courses of study validated for the use of software (BIM, VR, Pyton), for language knowledge (TOEFL, SAT, GRE, etc.) and for the technical and professional skills of qualified technicians, would make enrolment in the Faculty more attractive for a young secondary school graduate or for a young university graduate in other disciplines<sup>22</sup>.

If organizing the delivery of this set of integrative skills were to require additional costs beyond ordinary fees, this should be estimated by assessing their terms of feasibility, and perhaps by opening the offerings to other users not enrolled in the ordinary courses, but in more flexible courses (higher training courses) that require earning fewer credits than first- and second-level master's degrees. But what is most important is to guarantee the integration of competitive and updated soft skills into the traditional curriculum (hard skills).

These skills should be practised with the same pedagogical principle with which the Faculty's students enrolled between the 1920s and 1970s practised with the *ex tempore*, an exercise that guaranteed the acquisition of a medium/high level in the practice of drawing and in design capability – along with a certain nonchalance and speed of execution.

This would be on top of a guidance and placement service, defining a solid linkage with the professional Orders with which sooner or later a serious dialogue must be activated.

The professors, too, must be guaranteed the possibility of updating their digital and language skills at no cost to them, in order to make interaction with students more effective and to follow, with awareness, the evolution of the emerging and determinant issues that relate to the discipline of architecture and the practice of the architect's profession.

Not even our doctoral candidates and postdocs, except for those who have personally cultivated their own training, are on average equipped at an advanced level, on the basis of what the school has offered them in recent years; and it is important to consider this, taking account of the fact that a minimum portion of them will be candidates for teaching positions and do not possess technical and expressive skills much more advanced than the current teachers in service, in spite of the clear generational difference.

The present cultural and economic crisis can be dealt with by raising the added value of production capacity, as our colleagues at Sapienza<sup>23</sup> with experience in industry, work, and technologies<sup>24</sup>, explain.

I think it is the task of our academic community, in all its disciplinary and generational components, to be able to respond to this important challenge.

<sup>&</sup>lt;sup>22</sup> Sapienza has for years had a "computer English" course that over time has attracted only a few enrolees, also because it was little known. The means we used during the pandemic emergency might be of use for further spreading the possibility of attending these courses online, thus providing a fundamental collective service.

<sup>&</sup>lt;sup>23</sup> R. Gallo, Industria, Italia. Ce la faremo se saremo intraprendenti, Editrice Sapienza 2020.

<sup>&</sup>lt;sup>24</sup> Quale formazione per lavorare in una società IA centrica. La versione di Floridi e Bentivogli: https://formiche.net/2018/11/intelligenzaartificialelavoro/; An interesting dialogue between the already-cited philosopher dealing with artificial intelligence and an atypical trade unionist overturns some clichés: "it is the absence of technology – and not, as it is believed, technology – that has destroyed jobs … Unfortunately, a paradox in Italy as that when there are machines, there are no machinists … because 85% of the jobs that will exist in 2030 have yet to be invented."

Lastly, I realize I have neglected many other things (Do we want to establish an integrated design centre able to make a meaningful contribution to the university for feasibility studies and/or for the competitions and tenders necessary for developing qualitative care applied to the heritage? Do we want to accommodate some important figures in line with the nobler tradition embodied by Samonà's initiative for the Venetian institute? Do we want to institute prizes and honours of various kinds and degrees? Do we want to "furnish" our spaces with the works of our century of ingenuity – drawings, models, and so on – and some archaeological pieces? Do we want to strengthen the form of certain events, including that of the awarding of degrees?), but we have run out of space. I apologize for the long read I have given you.

Everything is important to raise the morale and the quality of our commitment, provided it is useful for continuing our history: all of us together, pulling in the same direction.

Rome, 12 October 2020 OC